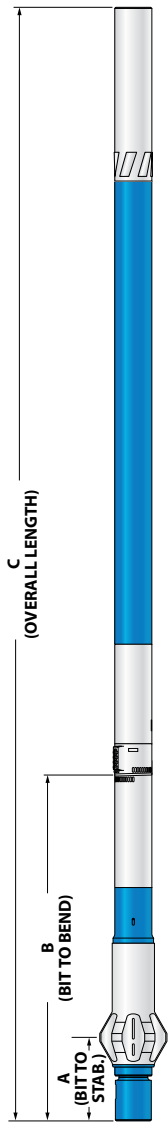


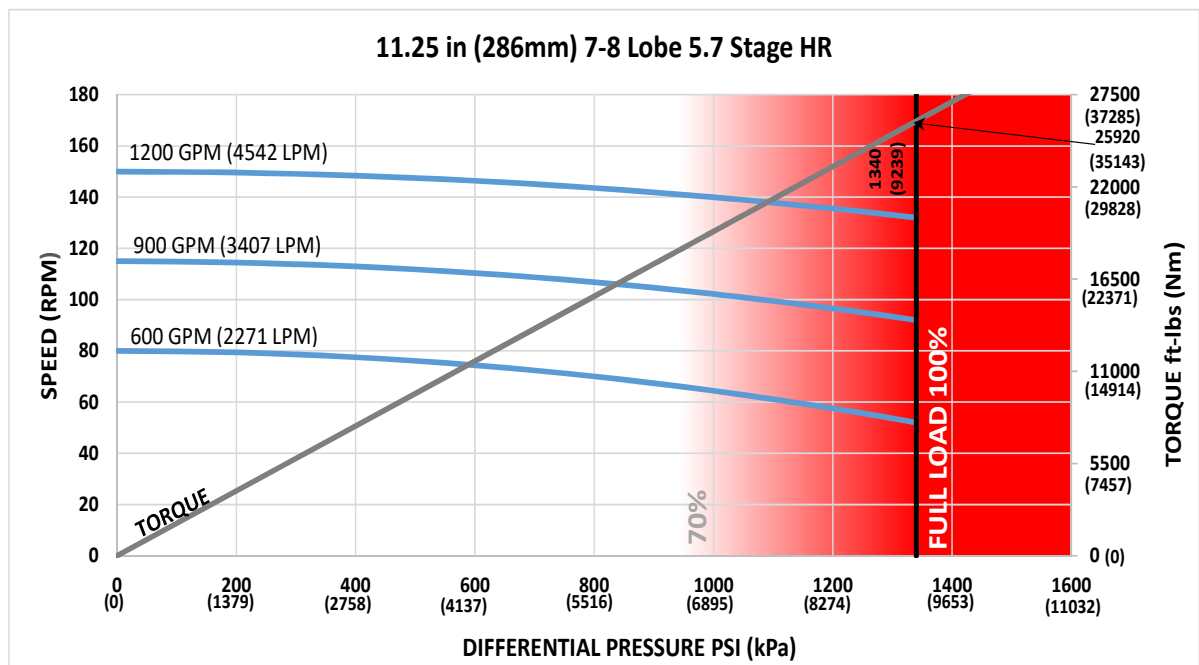
# 11.25 in (286mm) 7-8 Lobe 5.7 Stage HR **SERIES 1** 9-5/8" Rotor



|  |                       |              |
|--|-----------------------|--------------|
| <b>Bit Size Range</b>                      | 16 - 36 in            | 406 - 914 mm |
| <b>Bit Box Connection</b>                  | 7-5/8 REGULAR         |              |
| <b>Dynamic Bearing Load On/Off Bottom</b>  | 385750 lbf            | 171600 daN   |
| <b>Static Bearing Load On/Off Bottom</b>   | 1376000 lbf           | 612100 daN   |
| <b>Max. Overpull (For Re-run)</b>          | 784500 lbf            | 349000 daN   |
| <b>Absolute Overpull</b>                   | 1307500 lbf           | 581600 daN   |
| <b>Adjustable Makeup Torque</b>            | 75000 ft-lbs          | 101700 Nm    |
| <b>Stab/Thread Protector Makeup Torque</b> | 50000 ft-lbs          | 67800 Nm     |
| <b>A = Bit to Stabilizer (Centre)</b>      | 25.8 in               | 0.66 m       |
| <b>B = Bit to Bend</b>                     | Adjustable<br>93.5 in | 2.37 m       |
|  | Fixed<br>N/A          | N/A          |
| <b>C = Overall (With Dump Sub)</b>         | 407.3 in              | 10.35 m      |
| <b>Weight</b>                              | 9119 lb               | 4136 kg      |

|                                      |                       |            |
|--------------------------------------|-----------------------|------------|
| <b>Lobe Configuration</b>            | 7-8 Lobe 5.7 Stage HR |            |
| <b>Displacement (No Load)</b>        | 0.13 rev/gal          | 0.03 rev/l |
| <b>Max. Differential (Full Load)</b> | 1340 psi              | 9239 kPa   |
| <b>Max. Torque</b>                   | 25920 ft-lbs          | 35143 Nm   |
| <b>Max. Power</b>                    | 651 HP                | 486 kW     |

| Flow Rate |       | Speed     |
|-----------|-------|-----------|
| GPM       | LPM   | RPM       |
| 600       | 52271 | 52 - 80   |
| 900       | 3407  | 92 - 115  |
| 1200      | 4542  | 132 - 150 |



Possible damage may occur when motor is run higher than 70% of Maximum Differential Pressure.

### ADJUSTABLE BUILD RATE

| Hole Size         | SLICK                      |                |            |            | STABILIZED                 |                |            |            |
|-------------------|----------------------------|----------------|------------|------------|----------------------------|----------------|------------|------------|
|                   | 16 (406mm)                 | 17-1/2 (445mm) | 24 (610mm) | 36 (914mm) | 16 (406mm)                 | 17-1/2 (445mm) | 24 (610mm) | 36 (914mm) |
| <b>BEND ANGLE</b> | Degrees per 100 Feet (30m) |                |            |            | Degrees per 100 Feet (30m) |                |            |            |
| 0.39              | -                          | -              | -          | -          | -                          | -              | -          | -          |
| 0.78              | -                          | -              | -          | -          | 5.6                        | 6.4            | -          | -          |
| 1.15              | 0.5                        | -              | -          | -          | 7.5                        | 8.3            | -          | -          |
| 1.50              | 2.7                        | 0.3            | -          | -          | 9.2                        | 10.0           | 13.4       | -          |
| 1.83              | 4.7                        | 2.4            | -          | -          | 10.9                       | 11.7           | 15.0       | -          |
| 2.12              | 6.5                        | 4.2            | -          | -          | 12.3                       | 13.1           | 16.5       | -          |
| 2.38              | 8.2                        | 5.8            | -          | -          | 13.6                       | 14.4           | 17.8       | 24.0       |
| 2.60              | 9.5                        | 7.1            | -          | -          | 14.7                       | 15.5           | 18.9       | 25.1       |
| 2.77              | 10.6                       | 8.2            | -          | -          | 15.6                       | 16.3           | 19.7       | 25.9       |
| 2.90              | 11.4                       | 9.0            | -          | -          | 16.2                       | 17.0           | 20.3       | 26.6       |
| 2.97              | 11.8                       | 9.4            | -          | -          | 16.6                       | 17.3           | 20.7       | 26.9       |
| 3.00              | 12.0                       | 9.6            | -          | -          | 16.7                       | 17.5           | 20.8       | 27.0       |

Note: Stabilizers are 1/8" undergauge

### FBH BUILD RATE

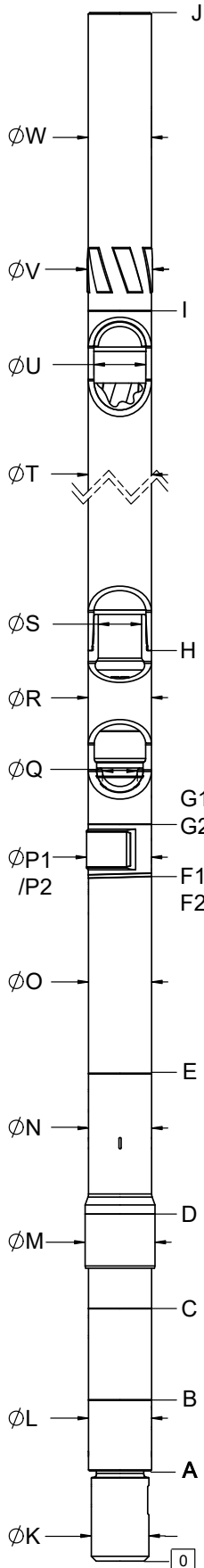
| Hole Size         | SLICK                      |                |            |            | STABILIZED                 |                |            |            |
|-------------------|----------------------------|----------------|------------|------------|----------------------------|----------------|------------|------------|
|                   | 16 (406mm)                 | 17-1/2 (445mm) | 24 (610mm) | 36 (914mm) | 16 (406mm)                 | 17-1/2 (445mm) | 24 (610mm) | 36 (914mm) |
| <b>BEND ANGLE</b> | Degrees per 100 Feet (30m) |                |            |            | Degrees per 100 Feet (30m) |                |            |            |
| 1.25              | N/A                        | N/A            | N/A        | N/A        | N/A                        | N/A            | N/A        | N/A        |
| 1.50              | N/A                        | N/A            | N/A        | N/A        | N/A                        | N/A            | N/A        | N/A        |
| 1.75              | N/A                        | N/A            | N/A        | N/A        | N/A                        | N/A            | N/A        | N/A        |
| 2.00              | N/A                        | N/A            | N/A        | N/A        | N/A                        | N/A            | N/A        | N/A        |
| 2.25              | N/A                        | N/A            | N/A        | N/A        | N/A                        | N/A            | N/A        | N/A        |
| 2.50              | N/A                        | N/A            | N/A        | N/A        | N/A                        | N/A            | N/A        | N/A        |

This information is for reference only. Build rates are theoretical calculations using three-point geometry and new motor builds. Actual rate predictions will depend on formation characteristics, bit profiles, and WOB.

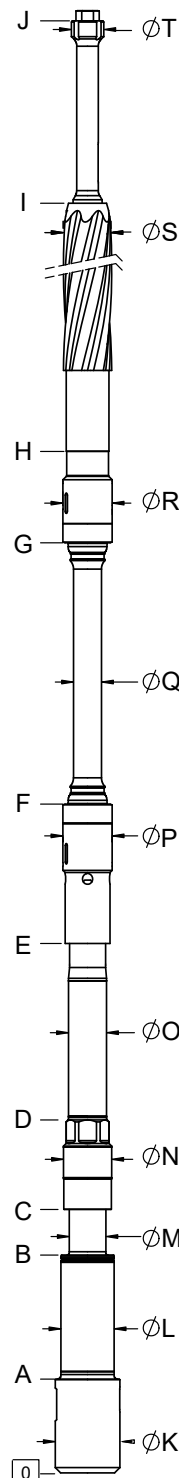
For custom motor configurations and build rates, please contact your DYNOMAX office.

**FISHING DIMENSIONS**

USC - IMPERIAL (Lengths, Diameters = in)  
SI - METRIC (Lengths = m, Diameters = mm)



| EXTERNALS                    |    | USC   | SI    |
|------------------------------|----|-------|-------|
| END CAP                      | A  | 11.1  | 0.28  |
| BEARING HOUSING              | B  | 21.8  | 0.55  |
| PISTON HOUSING               | C  | 36.0  | 0.91  |
| STABILIZER SHOULDER          | D  | 49.4  | 1.25  |
| KICK/FIXED HOUSING           | E  | 65.9  | 1.67  |
| BIT TO BEND (ADJUSTABLE)     | F1 | 93.5  | 2.37  |
| ADAPTOR HOUSING (ADJUSTABLE) | G1 | 101.8 | 2.59  |
| BIT TO BEND (FIXED)          | F2 | --    | --    |
| ADAPTOR HOUSING (FIXED)      | G2 | --    | --    |
| STATOR START                 | H  | 124.8 | 3.17  |
| STATOR END                   | I  | 364.8 | 9.27  |
| OVERALL LENGTH               | J  | 407.3 | 10.35 |
| BIT BOX Ø                    | K  | 10.50 | 266.7 |
| END CAP/BEARING HOUSING Ø    | L  | 11.25 | 285.8 |
| THREAD PROTECTOR Ø           | M  | 12.25 | 311.2 |
| PISTON HOUSING Ø             | N  | 11.25 | 285.8 |
| KICK/FIXED HOUSING Ø         | O  | 11.25 | 285.8 |
| PAD (ADJUSTABLE) Ø           | P1 | 11.75 | 298.5 |
| PAD (FIXED) Ø                | P2 | --    | --    |
| ADJUSTABLE MANDREL PIN Ø     | Q  | 7.25  | 184.2 |
| ADAPTOR HOUSING Ø            | R  | 11.25 | 285.8 |
| ADAPTOR PIN Ø                | S  | 8.25  | 209.6 |
| STATOR TUBE OUTER Ø          | T  | 11.25 | 285.8 |
| STATOR TUBE INNER Ø          | U  | 7.88  | 200.2 |
| ROTOR CATCH SUB BLADE Ø      | V  | 11.50 | 292.1 |
| ROTOR CATCH SUB Ø            | W  | 11.25 | 285.8 |



| INTERNALS                  |   | USC   | SI    |
|----------------------------|---|-------|-------|
| BIT BOX                    | A | 10.2  | 0.26  |
| THRUST SHOULDER            | B | 25.6  | 0.65  |
| WASHPIPE START             | C | 32.3  | 0.82  |
| HEX END                    | D | 44.0  | 1.12  |
| BEARING ASSEMBLY ADAPTOR   | E | 62.6  | 1.59  |
| BAA CAP                    | F | 81.2  | 2.06  |
| ROTOR ADAPTOR CAP          | G | 114.6 | 2.91  |
| ROTOR START                | H | 124.6 | 3.16  |
| ROTOR END                  | I | 355.5 | 9.03  |
| CATCH STEM                 | J | 378.5 | 9.61  |
| BIT BOX Ø                  | K | 10.50 | 266.7 |
| MANDREL Ø                  | L | 9.00  | 228.6 |
| THRUST Ø                   | M | 6.68  | 169.7 |
| WASHPIPE LARGE Ø           | N | 8.50  | 215.9 |
| WASHPIPE SMALL Ø           | O | 7.25  | 184.2 |
| BEARING ASSEMBLY ADAPTOR Ø | P | 8.31  | 211.1 |
| DRIVESHAFT Ø               | Q | 3.89  | 98.8  |
| ROTOR ADAPTOR Ø            | R | 7.10  | 180.3 |
| ROTOR MAJOR DIA. Ø         | S | 6.43  | 163.3 |
| ROTOR CATCH STEM Ø         | T | 4.38  | 111.3 |

This information is for reference only. Assemblies are displayed in an "Adjustable Configuration"

Rotor Catch and Rotor Catch Float Sub Lengths may vary based on configuration, and use of Dump Subs or combination Rotor Catch and Float Housings.

If any additional information is required, please contact your local DYNOMAX office.